

REMARKS/ARGUMENTS

Reconsideration of the rejections set forth in the Final Office Action dated August 9, 2004 and the Advisory Action dated November 17, 2004 is respectfully requested. Claims 1-23 were rejected. Claims 2, 9, and 16 have been cancelled. Claim 24 has been added. As such, claims 1, 3-8, 10-15, 17-24 are currently pending.

Claims 2, 9, and 16 have been cancelled as the limitations previously incorporated in claims 2, 9, and 16 have been incorporated into their respective base claims.

New claim 24 recites that registration information includes a MAC layer address and that a registration response includes an IP address. Support for this new claim may be found in the Specification, *e.g.*, on page 13 at lines 14-18.

Claims 1, 8 and 15 have been amended to include the limitations of claims 2, 9, and 15, respectively. Claims 1, 8, and 15 have also been amended recite that time slots are expandable, and that a first time slot is expanded to accommodate a new node when needed. Support for these amendments may be found in the Specification, as for example on page 14 at lines 3-5. Claims 3, 10, and 17 have been amended to depend from claims 1, 8, and 15.

Claims 5, 12, and 19 have been amended to recite that a registration response is sent from a master node to a newly contactable node via a selected wireless node, and to recite that a time allocation is created by expanding a transmission slot reserved for the selected wireless node. Support for these amendments may be found in the Specification, *e.g.*, from page 13 at line 6 to page 14 at line 6.

Claim 8, 7, 14 and 21 have been amended to recite that time slots are expandable. Support for these amendments may be found, for example, on page 14 of the Specification at lines 3-5.

Rejections under 35 U.S.C. § 102 and 35 U.S.C. § 103

Claims 1, 4, 8, 11, 15, and 18 have been rejected under 35. U.S.C. § 102(e) as being anticipated by Gehring et al. (U.S. Patent No. 6,597,683 B1), hereinafter "Gehring." Claims 5, 6, 12, 13, 19, and 20 have been rejected under 35. U.S.C. § 103(a) as being unpatentable over Gehring in view of Anvekar et al. (U.S. Patent No. 6,377,805 B1), hereinafter "Anvekar." Claims 3, 7, 10, 14, and 17 have been rejected under 35. U.S.C. § 103(a) as being unpatentable over Gehring in view of Bandeira et al. (U.S. Publication No. 2002/0072329 A1), hereinafter "Bandeira."

Independent claims 1, 8, 15, 22 and their dependents

The Applicant respectfully disagrees with the Examiner's rejections with respect to claims 1, 8, 15, 22 and their respective dependents, and notes that in the description of Fig. 3 of Gehring, **Gehring seems to indicate that all slave devices hear (receive) each other's transmissions**, as Gehring specifically discusses transceivers 36a-n receiving data from other transceivers 36a-n via antennas 40a-n. Gehring also teaches of data slots which provide data transmission time for corresponding slave devices (Gehring, column 9 at lines 34-40). However, data slots which provide data transmission time for corresponding slave devices do not teach of a generated schedule that precludes collisions between simultaneous transmission of pairs of nodes that do not hear each other's transmissions in Gehring. Since Gehring appears to teach of slave devices that all hear each other's transmissions, and does not even make any suggestion to the contrary, it is respectfully submitted that Gehring does not teach of pairs of nodes that do not hear each other's transmissions. Therefore, claim 1 is believed to be allowable over Gehring for at least these reasons.

Additionally, as amended, independent claims 1, 8, 25, and 22 recite that a time slot associated with a node that can be directly contacted by a master node is expandable to accommodate a new node. It is respectfully submitted that none of the cited art teaches of an expandable time slot. As such, claims 1, 8, 15, 22 and their respective dependents are further believed to be allowable over the cited art for at least this reason.

Independent claims 5, 12, 19, 23 and their dependents

With regards to independent claims 5, 12, 19, and 23, it is respectfully submitted that Anvekar does not appear to teach of a node receiving and forwarding registration information from new nodes to a master node. The Examiner argues on page 10 of the Final Office Action dated August 9, 2004, that Figs. 2 and 3 of Anvekar show that a newly contactable node 205 registers with a selected slave node 206 to establish data forwarding through slave node 206 and master node 203 to network server 201. It is respectfully submitted that Figs. 2 and 3, and the corresponding text, do not show a node that receives and forward registration information from a new node to a master node. There is no teaching of or suggestion in Anvekar of any communication occurring between a newly contactable node (unit 205) and the master node (unit 203) through a selected wireless node (unit 206). Although Anvekar discusses unit 206 communicating with unit 203 and unit 205, there is no suggestion that unit 205 communicates with unit 203 through unit 205. Hence, the Applicant submits that Anvekar does not teach of or reasonably suggest a method which includes receiving registration information from a newly contactable node at a selected wireless node, and forwarding the registration information from the selected wireless node to a master node. Accordingly, claim 5, 12, 19, 23 and their dependents are believed to be allowable over a combination of Gehring and Anvekar for at least this reason.

In addition, it is respectfully submitted that none of the cited art teach of sending a registration response from a master node to a newly contactable node via a selected wireless node, or of a time allocation for the newly contactable node that is created by expanding a transmission slot reserved for the selected wireless node, as required by claims 5, 12, 19, and 23. Since such limitations are present in claims 5, 12, 19, and 23, claims 5, 12, 19, 23, and their

respective dependents are also believed to be allowable over the cited art for these additional reasons.

Independent claims 7, 14, and 21

On page 7 of the Final Office Action dated August 9, 2004, the Examiner has admitted that Gehring does not show a time slot allocated as a subslot for transmission by a first node that can be directly contacted by a master node and a second node that cannot be directly contacted by the master node. It is respectfully submitted that Bandeira does not overcome the deficiencies of Gehring. Specifically, Bandeira does not teach of a time slot during which the repeater node transmits data to its master and during which a node that cannot be directly reached by the master node is also transmitting. On page 11 of the Final Office Action dated August 9, 2004, the Examiner has asserted that transmission of data to a master from the repeater node and transmission of data from a node that cannot be directly reached by the master node is also transmitting occurs within the same allocation time slot. The Applicant is unable to find such teaching in Bandeira, and notes that as shown in Fig. 4 of Bandeira, locations 2, 5, and 9 are not even polled at the same time. Hence, the Applicant submits that locations 2, 5, and 9, as shown in Fig. 4 of Bandeira, may not be said to transmit data at the same time, as alleged by the Examiner. Accordingly, claim 7, as well as claims 14 and 21, are each believed to be allowable for at least this reason.

Additionally, as amended, claims 7, 14, and 21 also recite that a first time slot is expanded to accommodate transmissions from a second node that cannot be directly contacted by a master node but can be directly contacted by a first node. The first time slot is allocated for transmission from the first node to the master node. The Applicant does not believe that a combination of Gehring and Bandeira teaches of such a feature. As such, it is respectfully submitted that claims 7, 14, and 21 are also allowable over the cited art for at least this additional reason.

Appl. No. 09/742,888
Amd. Dated: January 18, 2005
Reply to Final Office Action of August 9, 2004

Conclusion

For at least the foregoing reasons, the Applicant believes all the pending claims are in condition for allowance and should be passed to issue. If the Examiner feels that a telephone conference would in any way expedite the prosecution of the application, please do not hesitate to call the undersigned at (408) 446-8696.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Peggy A. Su". The signature is fluid and cursive, with the first name "Peggy" being more prominent.

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